

**FRESNO, CALIFORNIA
CLASS SPECIFICATION**

WASTEWATER SERVICES MECHANIC

FLSA STATUS:

Non-Exempt

CLASS SUMMARY:

The Wastewater Services Mechanic is the second level in a three level Utilities Wastewater Treatment Mechanic series. Incumbents are responsible for performing journey level equipment repairs, servicing, and maintenance of wastewater treatment plant and facilities. Incumbents are also responsible for assisting with plant equipment modification design, fabrication, machine work, and installation of new and replacement equipment.

The Wastewater Services Mechanic is distinguished from the Assistant Wastewater Services Mechanic by its responsibility for performing journey level maintenance and repair activities on wastewater treatment plant equipment and facilities. The Wastewater Services Mechanic is distinguished from the Senior Wastewater Services Mechanic, which as lead worker, has responsibility for making work assignments, overseeing the work of other Wastewater Services Mechanics, training, ordering and distributing supplies, preparing reports, and performing administrative tasks in the absence of the supervisor.

TYPICAL CLASS ESSENTIAL DUTIES: (These duties are a representative sample; position assignments may vary.)

**FRE-
QUENCY**

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|----|--|-------------------|
| 1. | Performs journey level maintenance and repairs on a variety of equipment, machinery, and control systems in treatment plant equipment and facilities to assure efficient plant operations. | Daily
60% |
| 2. | Servicing and performs preventative maintenance to all plant equipment, facilities and machinery by performing periodic lubrication, adjustment, cleaning, and inspections for worn parts. | Daily
40% |
| 3. | Diagnoses problems and implements necessary repairs, including preparing and maintaining records of work performed utilizing Computerized Maintenance Management System (CMMS). | Daily
10% |
| 4. | Overhauls and rebuilds motors, pumps, gearboxes, automated valves, hydraulic systems, pneumatic systems and other related industrial equipment. | Weekly
10%-20% |
| 5. | Designs, repairs and installs plumbing and pipefitting for stainless steel, mild steel, and cast iron and PVC pipe for applicable plant projects. | Weekly
5%-10% |
| 6. | Designs, fabricates, and installs a variety of items associated with plant equipment and machinery repairs. | Weekly
5% |
| 7. | Performs millwright duties such as mill, lathe, brake, sheer, pipegroover; and welding methods such as ARC, MIG, and TIG, Oxy-acetylene, gas and plasma cutting. | Weekly
25% |

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TYPICAL CLASS ESSENTIAL DUTIES: (These duties are a representative sample; position assignments may vary.)		<u>FRE- QUENCY</u>
8.	Installs and/or replaces equipment and machinery, including participating in major plant installations and overhauls.	Monthly 10%
9.	Optimizes equipment performance by using laser alignment, vibration analysis, thermal imaging and oil analysis.	Weekly 10%-20%
10.	Performs other duties of a similar nature or level.	As Required

Training and Experience (positions in this class typically require):

- One year of experience as a City of Fresno Assistant Wastewater Services Mechanic or three years of experience in the repair of pumps, gearboxes, automated valves, hydraulic systems, pneumatic systems and other related industrial equipment is required;
- OR
- An equivalent combination of education and experience sufficient to successfully perform the essential duties of the job such as those listed above. Prior fabrication, welding, and machinist work experience is desirable.

Licensing Requirements (positions in this class typically require):

- Basic Class C License
- California Water Environment Association Grade II Electrical /Instrumentation Technologist Certification

Knowledge (position requirements at entry):

Knowledge of:

- Applicable tools, equipment, vehicles and hardware and software related to area of responsibility
- Practices and methods related to mechanical, pneumatic, hydraulic and welding trades
- Mechanical, electrical and hydraulic principles as they relate to the operation of wastewater collection and treatment systems
- Advanced pneumatic and hydraulic principles
- Plumbing and pipe fitting techniques, practices and procedures
- Characteristics and safety requirements of the use of various chemicals
- Safe work practices and procedures
- Basic lubrication practices

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Skills (position requirements at entry):

Skill in:

- Using and caring for applicable tools and equipment utilized in the wastewater plant repair and maintenance activities including cranes (mobile/fixed) and electric power tools, laser alignment, lapping machine, mill lathe, bearing heater, infrared scanner
- Operating and maintaining applicable pumps, motors, equipment gearboxes, automated valves, hydraulic systems, pneumatic systems and other related industrial equipment.
- Reading and interpreting blueprints, schematics, and other technical drawings related to job duties
- Diagnosing mechanical, hydraulic, pneumatic, electrical, and electronic malfunctions in instrumentation, programmable logic controllers, and telemetry systems
- Installing plumbing systems and fixtures
- Safe handling of chemicals
- Evaluating the condition of equipment by using laser alignment, vibration analysis, thermal imaging and oil analysis
- Designing and fabricating machinery, equipment and associated components utilizing mill, lathe, brake, shear, pipegroover; and welding methods such as ARC, MIG, TIG, Oxy-acetylene, gas and plasma cutting
- Using computers and applicable software applications
- Communication, interpersonal skills as applied to interaction with coworkers, supervisor, the general public, business, organizations, elected and appointed officials, media, etc. sufficient to exchange or convey information, give/receive work direction

Physical Requirements:

Positions in this class typically require: feeling, finger dexterity, grasping, hearing, repetitive motions, seeing, talking, bending, kneeling, lifting, reaching, standing, stooping, walking, balancing, climbing, crawling, crouching, pulling and pushing.

Very Heavy Work: Exerting up to 100 pounds of force occasionally, and/or in excess of 50 pounds of force frequently, and/or in excess of 20 pounds of force constantly to move objects.

Incumbents may be subjected to moving mechanical parts, electrical hazards, vibrations, fumes, odors, dusts, poor ventilation, adverse weather conditions, environmental hazards, gasses, chemicals, oils, work space restrictions, inadequate lighting and intense noises.

Note:

The above job specification is intended to represent only the key areas of responsibilities; specific position assignments will vary depending on the business needs of the department.

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Classification History:

Draft prepared by Fox Lawson & Associates (LM)

Date: 12/2007

Reviewed by the City of Fresno

Date: 5/2008